



ELL Adaptation For

Tooling Around Arizona: Reading Arizona Maps

Students become acquainted with Arizona cities while learning map skills.

| | |
|--------------------|-------------------|
| Author | Barbara Post |
| Grade Level | 4-5 |
| Duration | 1-3 class periods |

ELL Adaptation by Shea Lemar

| SIOP Elements | | |
|--|---|--|
| Preparation Adapting content Linking to background Linking to past learning Strategies used | Scaffolding Modeling Guided practice Independent practice Comprehensible input | Grouping Option Whole class Small groups Partners Independent |
| Integrating Processes Reading Writing Speaking Listening | Application Hands on Meaningful Linked to objectives Promotes engagement | Assessment Individual Group Written Oral |

TESOL Standard(s)

ESL: English For Content
Through The Use Of ESL Methodologies, The Student Will:
EFC-A. Create, read and interpret visual information relating to science, social studies and math.
 A5. Create visuals to present information.
EFC-B. Use math skills to calculate and measure.
 B7. Calculate longitude, latitude, and distance.
EFC-C. Compose in a variety of forms.
 C1. Use Math, Social Studies, and Science target vocabulary.

Arizona ELP Standards

Stage III
Basic
Reading
Standard 4: The student will analyze text for expression, enjoyment, and response to other related content areas. The student will demonstrate reading comprehension by:
 B-20: identifying content vocabulary within math, science, and social studies texts.
 B-22: locating information for a specific purpose. (e.g., atlas, glossary, textbook, indexes, table of contents, etc.)

**Stage III
Basic
Writing**

Standard 1: The student will express his or her thinking and ideas in a variety of writing genres. The student will express his or her thinking and ideas in a variety of writing genres, as demonstrated by:

B-1: writing a narrative paragraph based on imagined or real events that include characters and plot with three or more details using appropriate transitional words, with instructional support.

B-3: taking notes using a teacher selected and student created graphic organizer or cloze notes with instructional support (e.g., *teacher modeling, visuals, word banks, etc.*).

Overview

Maps provide us with information about the land around us—including our neighborhood, city, state, country, and world. Maps have a special language all their own. Map language includes numbers, names, and symbols. These names, numbers, and symbols all represent real things that are usually too big to put on a piece of paper.

Key Vocabulary

Map – A flat drawing that depicts the Earth

Direction – The point, which something faces

City – A place where a lot of people live

Elevation – How high a place is above sea level

River – A place where water flows over land

Compass Rose –Shows directions on a map

Distance – The size of a gap between two places

Scale – Used to measure distances

Additional Materials Needed for ELL

- Vocabulary Cards
- Graphic Organizer:
<http://www.eduplace.com/graphicorganizer/pdf/cluster.pdf>

Procedures

SESSION ONE

1. Review the key vocabulary words listed above using the vocabulary cards.
2. Review the key concepts:

- Maps have a language of their own, they use names, numbers and symbols to speak
- You can use maps to find distance
- You can use maps to find direction
- You can use maps to find elevation

3. Ask the class to please raise their hands to tell you when they have used maps before
(Preparation: Linking to Background).

4. Quickly use websites or maps in your room to show the students different types of maps. Have the students quickly discuss them in class.

Possible websites:

- <http://www.google.com/earth/index.html>
Download Google Earth and type in the address of your school and show the students what they can see.
- <https://www.cia.gov/library/publications/cia-maps-publications/index.html> various types of maps done by the CIA
- <http://www.google.com/>, and search their images using keyword “maps”

5. Now, have the students break into triads and **(Grouping Options: Small Groups)** brainstorm words that describe what is found on maps **(Preparation: Strategy; Integrating Processes: Speaking; Application: Promotes Engagement)**. The responses need to be recorded on their notebook paper **(Integrating Processes: Writing)**. Use the following questions to help students think about what to write as they brainstorm: What kinds of maps are there? Where do you find maps? What are the parts of a map? What do you find on a map that helps you read and understand it? **(Integrating Processes: Listening)**

6. As a whole class, share information from students' brainstorm sheets **(Grouping Option: Whole Class)**. Organize the information using any type of graphic organizer (e.g. Word web). Subtitles of organizer could include Kinds of Maps, Purposes of Maps, and Map Vocabulary. Hand

Tooling Around Arizona: Reading Arizona Maps

out a copy of the word web to the students and have them fill in their worksheet along with you (**Scaffolding: Guided Practice**).

7. Based on students' knowledge, determine appropriate activity to continue lesson. If class has a common knowledge base, you are ready to continue with activities using maps. If class lacks adequate prior knowledge, begin lesson by reading and discussing the book Me on the Map or Maps and Globes to build a knowledge base for students.

SESSION TWO

8. Hand out AZ Cities map (with compass rose added if your students need it), Landform Regions of AZ map, and AZ Topography map. Direct students to find the Salt River. (Do not tell students which map to use.) Have the students refer to their vocabulary cards while reviewing the maps.

9. Give students a few minutes to look at the maps. Then pose the question: Which map had the Salt River on it? Have them write the answer on their notebook paper.

10. Pose the question: What was the name of the map that had the Salt River on it? Have them write the answer on their notebook paper.

11. Optional based on Student: Direct students to look at the three maps. Ask, "What are the similarities and differences between these three maps?" With students, make a list of things that they see on each map. You should have three specific lists when you are finished listing. For beginning ELL students, you can have them make a list of what is on each map. Have all the students write the answers on their notebook paper.

12. Say to students, "Maps are drawings that depict the earth or any part of it, large or small. Let's review the parts of a map (**Preparation: Linking to Past Learning**). Maps have titles that tell the name of the map. The title often tells you specific information that can be found on the map."

13. Look at the three maps. Discuss the titles and purposes of each map. Ask students who would use each of the maps and for what purpose. (Topography maps show changes in elevation as well as water bodies.) Have the students write the titles of the three maps on their notebook paper.

14. Say, "Symbols are representations of important features on the map. Look at each map and study the symbols and meanings." Have the students draw the city symbol on their notebook paper. (**Application: Promotes Engagement**)

15. Say, "A scale on a map is used to measure distances using inches and centimeters. Look at each map and determine what the scale measures." Review how to use a scale to measure distance.

16. With the students still in triads (**Grouping Options: Small Groups**), use the Measuring Distance worksheet to practice measuring distances between two cities in Arizona (**Application: Hands-on**).

17. Say, "A compass rose shows the directions on a map. Sometimes it includes only cardinal directions. Sometimes it also includes intermediate directions." Discuss cardinal and intermediate directions. Be sure to have the vocabulary card for compass rose out while discussing this (**Scaffolding: Comprehensible Input**).

18. Look at Arizona's Cities, with Latitude and Longitude map with added compass rose, and determine what kind of directions the compass rose shows. If your students are more advanced, give them the Arizona Cities map without the compass rose.

SESSION THREE

19. While in the same triads or new ones, use Determining Directions Worksheet to practice determining direction on map when going from one city in Arizona to another.

20. Say, "Elevation is the measurement of the altitude of the land in relation to sea level. Look at the "Arizona Topography map." Discuss the key that shows the different elevations in Arizona.

21. In the triads, use the Elevation Worksheet to practice recognizing elevations in Arizona (**Assessment: Group**), (**Assessment: Written**).

22. Administer the assessment to each individual student following completion of the above activities (**Assessment: Individual**), (**Assessment: Written**). Be sure to hand out the proper assessments to the different levels of ELL students.

Assessment

Tooling Around Arizona: Reading Arizona Maps

A multiple-choice assessment will be administered to students once the concepts/activities have been introduced and practiced. Mastery will be considered 80% or higher on each worksheet. Please note there is a separate assessment

worksheet for different ELL levels and the non-ELL student.